

Bonus +3

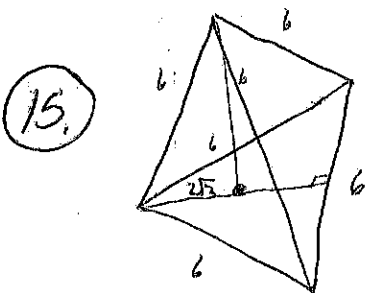
p683 9-12, 15-18, 22, 23

9. Vary or  $\begin{matrix} 96 u^2 \\ 66 u^2 \end{matrix}$   
 $LA = ph$   
 $18.5$   
 $90 u^2$

10.  $LA = ph$   
 $(15+20+25) 8$   
 $60$   
 $480 u^2$

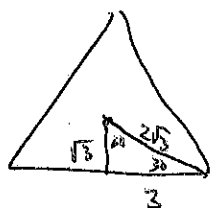
11.  $LA = ph$   
 $(4+7+4+3+5) 8$   
 $23 \cdot 8$   
 $184 u^2$

12.  $r = 8$   $h = 22 ft$   
 $p = 16\pi$   
 $B = 64\pi$   
 $LA = 16\pi \cdot 22 = 352\pi$



$h = 8 + 4.9$

$h = 12.9 u$



$6^2 = (2.5)^2 + h^2$   
 $36 = 12$   
 $24 = h^2$   
 $4.9 = h$

$TA = 352\pi + 2(64\pi)$   
 $480\pi ft^2$   
 $\approx 1508.0 ft^2$

16.  $LA = \frac{1}{2} p \cdot h = 18 \cdot 8 = 144 u^2$

Pr  $LA = \frac{1}{2} 18 \cdot 5.2$   
 $46.8 u^2$

$144 + 46.8 = 190.8 u^2$

$d^2 = 3^2 + 4.9^2$   
 $3$   $24$   
 $27$

$d = 5.2$

17.  $SA = 190.8 + \frac{6 \cdot 2\sqrt{3}}{4}$   
 $15.6$

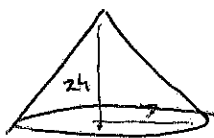
$= 206.4 u^2$

18.  $h = 24$   $r = 7$

$p = 14\pi$   $B = 49\pi$

$LA = \frac{1}{2} 14\pi \cdot 25$   
 $175\pi$

$TA = 175\pi + 49\pi = 224\pi u^2$   
 $703.7 u^2$



$d = 25$

22.  $d = 14 m$   
 $r = 7 m$

$A = 4\pi 7^2 = 196\pi = 615.8 m^2$

23. Great Circle  $A = 116 ft^2 = \pi r^2$

$A = 4 \cdot 116$   $464 ft^2$

p 723 4, 5, 7-10, 14

(4)  $d = 6$

$V = 9\pi \cdot 8 = 72\pi \approx 226.2 \text{ yd}^3$

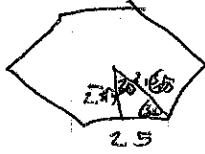
(5)  $V = 6 \cdot 14 \cdot 10$

$840 \text{ mm}^3$

(7)  $V = \frac{1}{3} 25 \cdot 3$

$25 \text{ ft}^3$

(8)



$V = \frac{1}{3} \left( \frac{1}{2} (2.5\sqrt{3}) 36 \right) 12$

$150\sqrt{3} \approx 259.8 \text{ m}^3$

$13^2 = 5^2 + h^2$

$169 = h^2$

$13 = h$

(9)  $V = \frac{1}{3} \pi (4.1)^2 6.8$   
 $38.1\pi$   
 $119.7 \text{ m}^3$

(10)  $V = \frac{1}{3} 12\pi \cdot 9$

$363\pi$   
 $1140.4 \text{ m}^3$

$C = 22\pi$

$d = 22$

$r = 11$

(14)  $A = 4\pi r^2 = 184 \text{ in}^2$

$r^2 = 14.64$

$r = 3.83$

$V = \frac{4}{3} \pi (3.83)^3$

$= 74.7\pi$

$234.7 \text{ m}^3$